

# How is the Landscape Changing Due to Human Activities?

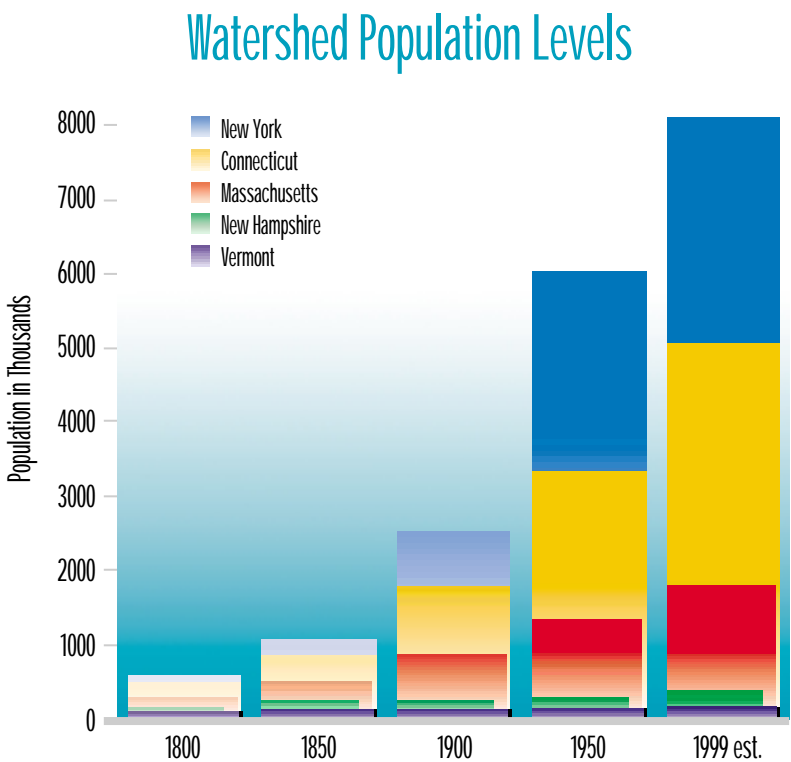
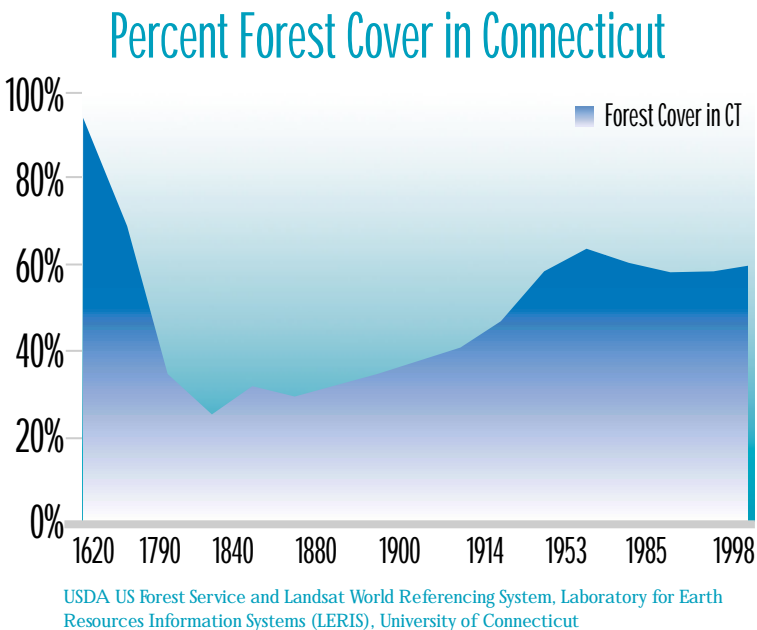
Many of the changes in the quality of Long Island Sound are driven by changes that have occurred in the surrounding landscape. Of particular concern are the loss of wetlands, forests, farms, and other open space to development. Following World War II, the area around Long Island Sound experienced rapid population growth. Residential, commercial, and recreational development increased pollution, altered land surfaces, reduced open spaces, and restricted access to the Sound. The use of the Sound as a place to dispose of human and other wastes increased dramatically. The "paving over" of the land increased runoff and reduced the filtration and processing func-

tions of natural landscapes. Development destroyed or altered many vital habitats, harmed native wildlife populations, and reduced breeding grounds and nursery areas for many native species.

Back in the 1800s and early 1900s, compact towns and cities, surrounded by farms and forests, dotted the watershed. After World War II, the automobile made it easy to live out of town and suburbia was born. Suburban sprawl has now brought a new set of environmental problems to manage.

## Forest Cover

From the 1600s through the 1800s, forest area decreased as land was cleared for agriculture, housing, and industry. However, in the 1900s, many farms were abandoned and trees grew back. This has caused a huge increase in the amount of forest area during the last 100 years. Healthy forests contribute to healthy rivers and, ultimately, a healthy Long Island Sound. Forests are important because they capture rainfall, reduce stormwater runoff, maintain stream flow, reduce erosion, trap nutrients, and stabilize soil. They provide places for recreation, and supply the raw materials for fuel, lumber, and paper. Forests also provide many kinds of habitat important to the survival of fish and wildlife. When streams and shorelines are buffered by forests, the amount of nutrients and soil washing into Long Island Sound is reduced.



Compiled by M.E. Hastings, USGS Coastal and Marine Geology Team, Woods Hole Field Center, from population data maintained by the U.S. Census Bureau (1999) at <http://fisher.lib.virginia.edu/census> and Inter-University Consortium for Political and Social Research (ICPSR) (1999) at <http://www.census.gov/population/www/index.html>



## Watershed Population Levels

More than 8 million people live in the Long Island Sound watershed. More than 21 million people live within a 50-mile radius of the Sound. While population levels in the Long Island Sound watershed are expected to remain fairly stable in the future, there has been an increasing population shift toward the coast.